

NOTICE OF COMMENT PERIOD

LSA Document #14-XXX

**Indiana Department of Environmental Management
Office of Water Quality
Notice of Public Comment Period for the Draft 2014 List of Impaired Waters
and Consolidated Assessment and Listing Methodology
under Section 303(d) of the Clean Water Act**

PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) is soliciting public comment for the development of its draft 2014 303(d) List of Impaired Waters and the Consolidated Assessment and Listing Methodology (CALM) used to develop it. The 303(d) list will be submitted to the United States Environmental Protection Agency (U.S. EPA) on April 1, 2014. Any person having water quality data to support or refute the listing of a specific waterbody or to add a waterbody to the list will be able to provide that information to IDEM during the public comment period. Comments and suggestions regarding the CALM will also be accepted during this period. IDEM will review and respond to all comments received and will work with U.S. EPA after the comment period ends to finalize the list for U.S. EPA approval.

The draft 303(d) list and the CALM will be also be available [publication date] on IDEM's website at: <http://www.in.gov/idem/programs/water/303d/index.html>

AUTHORITY: IC 13-18-2-3.

SUBJECT MATTER

Basic Purpose and Background

The IDEM Office of Water Quality (OWQ) is preparing to update its 303(d) List of Impaired Waters, as required by Section 303(d) of the federal Clean Water Act (CWA) and the Water Quality Planning and Management regulation contained in the Code of Federal Regulations (CFR) at 40 CFR Part 130. Under the CWA, each state is required to assemble all existing and readily available water quality related data and information for use in assessing its waters for compliance with the state's water quality standards (WQS). Water quality criteria are developed to protect uses articulated in Indiana's WQS, including recreational uses, aquatic life use, and the use of some waters as a drinking water resource. The state is then required to prepare and make public a list of those waters not meeting WQS and the methodology used to evaluate the data and determine impairment status. The 303(d) List of Impaired Waters will identify:

- the portion of the waterbody that is impaired;
- the pollutant or pollutants not meeting WQS thereby causing the impairment; and
- a schedule for development of a Total Maximum Daily Load (TMDL).

A TMDL evaluation is a process that quantifies the amount of a specific pollutant that a waterbody can assimilate and still meet WQS. What constitutes a pollutant is described in Section 502(6) of the CWA and includes materials such as sewage, chemical wastes, biological materials, and wastes from industrial, municipal, and agricultural operations. The definition also encompasses drinking water contaminants that are regulated under Section 1412 of the Safe Drinking Water Act. A TMDL is a written, quantitative assessment that:

- identifies how much of the pollutant is coming from point sources and nonpoint sources;
- specifies the amount of pollutant reduction necessary from each source in order to meet the WQS set for that pollutant; and
- lays the groundwork for developing and implementing a plan to reduce the amount of the pollutant coming from each source.

As part of IDEM's TMDL process, the public is invited to participate in the plan to develop and implement the TMDL.

Status of U.S. EPA Approval of Indiana's 303(d) List of Impaired Waters

On May 8, 2013, IDEM received a partial approval of Indiana's 2010 303(d) list. The U.S. EPA's partial approval is based on issues regarding changes IDEM made to the 303(d) list in response to public comments received prior to IDEM's submission of the 2010 303(d) list to the U.S. EPA. The U.S. EPA's proposed decision identifies the water quality limited segments and associated pollutants to be added to Indiana's 2010 Section 303(d) list. The U.S. EPA published its proposed decision for a 30 day public comment period on June 14, 2013, and reopened the comment period on September 13, 2013, to allow an additional 30 days for the public to comment on the proposed changes. The U.S. EPA's decision document, which explains the rationale for its decision and the specific waterbodies to which it pertains, is available online at: <http://www.epa.gov/region5/water/impairedwatersin/index.html>

More detailed information regarding IDEM's position on the waterbodies and pollutants in question can be found in IDEM's 2010 303(d) list submittal, which is available online at: <http://www.in.gov/idem/nps/3889.htm>.

The issues raised by the U.S. EPA in response to IDEM's 2010 303(d) list submittal have yet to be resolved. IDEM did not add the impairments proposed by U.S. EPA in its 2010 decision document to Indiana's 303(d) list submittal for 2012, and these impairments have not been added to the draft 2014 303(d) list published in this notice.

These issues illustrate that any concerns the U.S. EPA may have regarding revisions to a state's assessment methodologies and corresponding changes to its 303(d) list can impose significant delays in approval. For this reason, IDEM has determined that reviewing all public comments together with those provided by the U.S. EPA will allow IDEM to more effectively evaluate all the available information and will allow IDEM to work through any issues and receive timely approval from the U.S. EPA.

To date, IDEM has received no communication from the U.S. EPA regarding the status of its review of IDEM's April 1, 2012 303(d) list submittal. There also has been no communication from the U.S. EPA about the revisions to the 303(d) list that IDEM submitted as an addendum to the Integrated Report on December 28, 2012.

APPLICABLE FEDERAL LAW

The 303(d) List of Impaired Waters is developed pursuant to Section 303(d) of the federal CWA. This notice serves as a solicitation for any additional water quality related information that may be used to further develop and refine the 2014 303(d) list and satisfies the federal Water Quality Planning and Management regulation at 40 CFR Part 130.

PUBLIC PARTICIPATION

IDEM presented the 2014 Draft 303(d) List of Impaired Waters at the March 12, 2014 Environmental Rules Board meeting, which was held at the Indiana Government Center in Indianapolis. This meeting was open to the public and the public was given an opportunity to discuss the list.

REQUEST FOR PUBLIC COMMENTS

At this time, IDEM solicits the following:

- (1) Water quality data or water quality related information to support or refute the listing of a specific waterbody or to add a waterbody to the 303(d) list.
- (2) Comments and suggestions regarding the CALM.

Comments may be submitted in one of the following ways:

- (1) By mail or common carrier to the following address:

LSA Document #14-XXX 2014 Draft 303(d) List of Impaired Waters
Betsy Rouse, Administrative Assistant
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Avenue
MC 65-41
Indianapolis, IN 46204-2251

- (2) By facsimile to (317) 233-5970. Please confirm the timely receipt of your faxed comments by calling the Rules Development Branch at (317) 233-8903.

- (3) By electronic mail to browse@idem.in.gov. To confirm timely delivery of your comments, please request a document receipt when you send the electronic mail. **PLEASE NOTE: Electronic mail comments will NOT be considered part of the official written comment period unless they are sent to the address indicated in this notice.**

- (4) Hand delivered to the receptionist on duty at the thirteenth floor reception desk, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana.

Regardless of the delivery method used, to properly identify each comment with the action it is intended to address, each comment document must clearly specify the LSA document number of the action on which you are commenting.

COMMENT PERIOD DEADLINE

All comments must be postmarked, faxed, or time stamped not later than [*publication date plus 90 days*]. Hand-delivered comments must be delivered to the appropriate office by 4:45 p.m. on the above-listed deadline date.

Additional information regarding this notice may be obtained from Jody Arthur, Watershed Assessment and Planning Branch, Office of Water Quality, (317) 308-3179 or (800) 451-6027 (in Indiana).

INDIANA'S 2014 CONSOLIDATED ASSESSMENT AND LISTING METHODOLOGY

For the development of the 2014 Draft 303(d) List of Impaired Waters, IDEM has followed, to the degree possible, the 305(b) and 303(d) reporting methods outlined in the U.S. EPA "Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act" (U.S. EPA, 2003) and the additional guidance provided in the U.S. EPA memorandums containing information concerning CWA Sections 303(d), 305(b), and 314 integrated reporting and listing decisions for the 2006, 2008, 2010, 2012, and 2014 cycles (U.S. EPA, 2005-2013).

The 303(d) list was developed using IDEM's 305(b) Assessment Database (ADB). Interpretation of the data and listing decisions take into account the U.S. EPA's guidance and IDEM's current (CALM).

One aspect of the U.S. EPA's guidance calls for a comprehensive listing of all monitored or assessed waterbodies in the state based on the state's assessment and listing methodology. Each waterbody assessment unit (AU), which may consist of an entire waterbody or a segment of a larger waterbody, is to be placed in one or more of five categories depending on the degree to which it supports designated uses. The U.S. EPA's guidance encourages states to place a waterbody AU in additional categories as appropriate in order to more clearly illustrate where progress has been made in TMDL development and other restoration efforts. A detailed explanation of the five categories is provided in IDEM's CALM in Attachment 1. The following is a summary of the five categories:

- Category 1** **Attaining the water quality standard for all designated uses and no use is threatened.**
- Category 2** **Attaining one or more of the designated uses; no use is threatened; and insufficient data and information are available to determine if the remaining uses are attained or threatened.**
- Category 3** **Insufficient data and information exist to determine if any designated use is attained.**
- Category 4** **Impaired or threatened for one or more designated uses but does not require the development of a TMDL.**
 - A. A TMDL has been completed that is expected to result in attainment of all applicable WQS and has been approved by U.S. EPA.
 - B. Other pollution control requirements are reasonably expected to result in the attainment of the WQS in a reasonable period of time.
 - C. Impairment is not caused by a pollutant.
- Category 5** **Applicable water quality standard is not attained.**
 - A. The waters are impaired or threatened for one or more designated uses by a pollutant or pollutants and require a TMDL.
 - B. The waters are impaired due to the presence of mercury or PCBs, or both, in the edible tissue of fish at concentrations exceeding Indiana's human health criteria for these contaminants.

The 303(d) List of Impaired Waters will consist of all impairments listed in Category 5. This category includes waters where the WQS is not attained because the waterbody AU is impaired or threatened by one or more pollutant or pollutants for each of which a TMDL is required. It should be noted that the U.S. EPA's most recent guidance does not change existing rules for listing and delisting waterbody impairments from Category 5. The existing regulations still require states, at the request of the U. S. EPA's Regional Administrator, to demonstrate good cause for not including waterbody impairments on the 303(d) list that were included on previous 303(d) lists (pursuant to 40 C.F.R. 130.7(b)(6)(iv)).

DEVELOPMENT OF DRAFT 2014 303(D) LIST

Organization of Indiana's 303(d) List of Impaired Waters

IDEM maintains assessment information for all Indiana waters in its ADB for CWA 305(b) reporting and 303(d) listing purposes and to provide assessment information when requested by the public. Each lake, stream, or reach of stream in the ADB is assigned a unique assessment unit identification (AUID). IDEM's methods for defining representative units of assessment are described in detail in IDEM's CALM (Attachment 1). The sizes of AUs in the ADB vary based on a number of factors. A single AU may or may not represent the entire river or stream to which it is associated. IDEM's methods for defining representative AUs are discussed in detail in the CALM.

Each impairment is listed individually on Indiana's 303(d) list to achieve consistency in how U.S. EPA tracks TMDL development and to facilitate more effective planning by IDEM. Therefore, a single AU may appear on the 303(d) list for one or more impairments.

Changes in Segmentation and Their Effect on Indiana's 303(d) List of Impaired Waters

The geographical extent and location of each AU within a given 12 or 14 digit hydrologic unit code (HUC) are defined for mapping purposes through a process called reach indexing. Reach indexing uses software tools that work with geographical information systems (GIS) applications to delineate for a waterbody one or more units of assessment and to "key" these AU (as defined by IDEM) to the National Hydrography Dataset (NHD)¹. This "key" is called the Reach Index. IDEM developed its first statewide Reach Index in 2002, which facilitates mapping of Indiana's 305(b) assessments and 303(d) listings in GIS applications and incorporation of this information into IDEM's ADB and the U.S. EPA's national databases.

When Indiana created its Reach Index in 2002, the NHD was available only in medium resolution (1:100,000 scale), and, in keeping with the then current methods of indexing, IDEM assigned each waterbody an AUID based on the 14 digit watershed in which it was located. In most cases, each 14 digit watershed was assigned a single AUID regardless of how many individual streams were located in the watershed. Therefore, an assessment of any stream would be applied to all the streams in the watershed regardless of where the sample was located or its relative representativeness to each stream. This problem was not preventable at the time because, while the software tool had the capability to re-index or "split" these watershed-wide AUs into smaller AUs, it had no built-in means for tracking changes in segmentation or the corresponding

¹ The NHD is a database created by the U.S. EPA and the United States Geological Survey that provides a comprehensive coverage of hydrographic data for the United States. It uniquely identifies and interconnects the stream segments that comprise the nation's surface water drainage system and contains information for other common surface waterbodies such as lakes, reservoirs, estuaries, and coastlines.

application of existing assessment information for CWA purposes.

In 2006, IDEM developed an administrative process to support the splitting of AUs into smaller units allowing more accurate application of assessment data and for tracking those changes in the ADB. At that time, changes in segmentation were considered on a case-by-case basis and were generally made either to accommodate a more accurate assessment or to correct an earlier assessment in which the data were inappropriately applied.

When the NHD became available for Indiana at the high resolution (1:24,000 scale), IDEM found that a significantly higher number of first and second order streams² appear at this scale than were visible in its original Reach Index. These small streams and stream networks are an important component of the hydrology in their watersheds and can have significant effects on water quality in larger streams. Therefore, IDEM began revising its Reach Index in 2008 to incorporate the high resolution NHD allowing still more accurate application of assessment data and a more comprehensive picture of water quality conditions throughout Indiana.

IDEM completed the indexing of all high resolution streams in Indiana and the data processing needed to enter the resulting segmentation information into the ADB in early 2014. The next and final phase of this work is to conduct a statewide review of the new high resolution index to correct any errors and to ensure consistency in the application of indexing decision rules that IDEM developed to govern how assessment units are defined. Once this work is complete, re-indexing will be conducted on a very limited basis when needed to support National Pollutant Discharge Elimination System permit development or other OWQ program needs.

All changes in segmentation must be accurately tracked so that 305(b) assessment and 303(d) listing information associated with the original AU is not lost. IDEM's methods for tracking segmentation changes for the purposes of reporting to the U.S. EPA have evolved throughout the course of this project. Despite some administrative changes over time, IDEM has, at the request of the U.S. EPA, consistently retired the original AUID for any AU re-indexed. IDEM also continues to evaluate any existing information in the ADB for all designated uses assessed to ensure that no valuable information is lost and that assessment information is appropriately applied to each resulting new AU.

All AUIDs that have been retired due to segmentation changes during the 2014 cycle are identified in Attachment 2.

IDEM's Use of External Data

Section 303(d) of the CWA requires that states consider all readily available data sources in the preparation of their 303(d) lists and 305(b) assessment process. IDEM reviews data generated and submitted by external parties that is obtained in any of the following three ways:

- Provided to IDEM through 319(h) and 205(j) grant agreements;
- Provided to IDEM through the TMDL development process;
- Provided to IDEM in response to 305(b)/303(d) solicitations.

² Stream order is a measure of the relative size of streams. Streams sizes range from the smallest "first-order" stream (for example, a small creek) to the largest or "twelfth-order" stream (for example, the Amazon River).

Although these data are collected by organizations external to IDEM, most of these data sets are submitted to IDEM and housed internally making them easily obtainable through program staff within IDEM. All data received are reviewed for usability in accordance with IDEM's Assessment Branch, Quality Assurance Project Plan (QAPP) (IDEM, 2004).

IDEM has also received a number of water quality data sets from external organizations. IDEM has found that the external data sets shown in Table 1 meet the necessary data quality requirements as outlined in IDEM's QAPP for 305(b) assessment purposes and is currently in the process of evaluating these data. IDEM anticipates incorporating any of the impairments identified as a result of these assessments into its 2016 303(d) list submittal.

Table 1: Sources of External data sets determined by IDEM to meet the necessary data quality requirements as outlined in IDEM's Assessment Branch QAPP for 305(b) assessment purposes.

| Source |
|---------------------------------|
| AMERICAN WATER COMPANY |
| CITY OF ELKHART |
| CITY OF INDIANAPOLIS |
| CITY OF MUNCIE |
| CITY OF SOUTH BEND |
| CITY OF VALPARAISO |
| MARION COUNTY HEALTH DEPARTMENT |

Development of Indiana's 2014 Draft 303(d) List Pending the U.S. EPA Approval of the 2012 303(d) List

Each 303(d) list builds upon the previously approved list. The challenges associated with developing a 303(d) list that accurately conveys the status of impairment of Indiana waters are compounded because, as the list is being developed, it is subject to change as a result of negotiations with the U.S. EPA. Despite this, IDEM continues to make progress in its water quality assessments and remains committed to moving forward in its reporting of results to the public despite the unresolved issues associated with either the 2010 or 2012 303(d) list. Therefore, in order to develop the Indiana's draft 2014 303(d) list, IDEM segregated the impairments still in question from the rest of the 2012 303(d) list and has made revisions based on the most current information available.

WATERBODY IMPAIRMENTS PROPOSED TO BE REMOVED FROM INDIANA'S 303(D) LIST OF IMPAIRED WATERS

Waterbody Impairments Removed from Category 5A as a Result of TMDL Development

The CWA does not clearly define the timeline for TMDL development. However, in response to the 1998 Federal Advisory Committee Act (FACA) committee's recommendations, U.S. EPA has issued guidance for states to develop expeditious schedules of not more than eight to 15 years. In accordance with the CWA, the 303(d) list guides TMDL development. IDEM works with U.S. EPA through every 305(b)/303(d) assessment and listing cycle to determine the number of TMDLs that must be developed in order to keep pace with the number of new impairments identified each cycle and to meet the goal of completing TMDLs for impairments within 15 years of their listings.

This short term (two-year) schedule for TMDL development is currently under development and will be submitted to U.S. EPA with IDEM's submittal of its Integrated Report and 303(d) list in 2014. IDEM will also provide with its submittal a long term TMDL development schedule that will identify a timeline for TMDL development for all impairments identified on the draft 2014 303(d) list.

To develop both schedules, IDEM generally prioritizes TMDL development to address impairments identified on its earliest 303(d) lists. However, because IDEM employs a watershed approach that considers all the known impairments in a given watershed, the resulting TMDL reports commonly include additional impairments identified in subsequent 303(d) lists and impairments newly identified as a result of the additional water quality monitoring conducted for TMDL development.

IDEM focuses its TMDL development on bacteria and impaired biotic communities with nutrient-related sources because these are the types of impairments most commonly identified in Indiana waters. Most of these impairments have been found through TMDL development to be nonpoint source driven and their sources are relatively well understood. Therefore, the resulting TMDLs readily lend themselves to effective management through locally led watershed management planning and implementation efforts.

For the 2014 cycle, IDEM moved a total of 56 impairments previously listed in Category 5 to Category 4A based on TMDL approvals. Of this total, there are 47 impairments that were moved based on TMDLs approved in previous cycles (Attachment 3, Table 3b). These impairments were added back to Category 5 as a result of changes made in segmentation and have since been verified to have originated from reaches with impairments for which a TMDL has been approved. The remaining nine impairments were based on new TMDLs approved for the 2014 cycle (Attachment 3, Table 3c).

TMDLs were also approved for an additional 69 newly identified impairments (Attachment 3, Table 3d). These impairments were found during assessment of data collected for TMDL development and have been added directly to Category 4A. Their addition to Category 4A does not change the number of impairments listed in Category 5. They are included in this notice in order to provide a full accounting of all impairments for which TMDLs have been approved during the 2014 cycle.

To facilitate public review, all impairments moved into Category 4A for the 2014 cycle are identified in Attachment 3, Table 3a and are keyed to the TMDL in which they are addressed. The TMDL reports for approved TMDLs, along with information on their development, can be found online at: <http://www.in.gov/idem/nps/2347.htm>.

Waterbody Impairments Removed from Category 5 Due to Changes in Segmentation

In accordance with IDEM procedure and U.S. EPA policy, impairments may not be removed from the 303(d) list based solely on changes in segmentation. All impairments in an AU that has been re-indexed must be reevaluated to determine their applicability to the resulting new AUs. All impairments that were delisted as a result of changes in segmentation for the 2014 cycle are identified in Attachment 4. For the 2014 cycle, IDEM has removed a total of 802 impairments from Category 5 as a result of changes in segmentation.

Waterbody Impairments Removed from Category 5 Based on New or Revised Assessments Indicating that Applicable Water Quality Standards Are Being Met

This section includes waterbody impairments removed from Category 5 based on more recent data or other information for previously assessed impairments that have become available since IDEM's 2012 303(d) list submittal. The waterbody impairments removed from Indiana's 303(d) list are located primarily in the Great Lakes basin and Ohio River tributaries, which were sampled by IDEM in 2010, and the White River, West Fork basin sampled in 2011. Assessments for the Ohio River were also revised this cycle based on data and information provided by the Ohio River Valley Sanitation Commission (ORSANCO). Detailed information on how IDEM incorporates ORSANCO's data and assessments into the state's 303(d) listing processes is provided in IDEM's CALM.

As a result of these assessments, IDEM has found that water quality standards are now met for a total of 80 previously identified impairments (Attachment 5). These impairments have been removed from Category 5A for the 2014 cycle.

Waterbody Impairments Removed from Category 5 Based on IDEM's Ongoing Review to Identify Errors and Omissions and to Ensure Consistency with Indiana's Water Quality Standards

IDEM routinely reviews its 303(d) list for errors and omissions and to ensure consistency with Indiana's WQS and the information IDEM maintains in its ADB. For the 2014 cycle, IDEM has identified a total of 21 impairments that should not be listed in Category 5 for various reasons. These impairments and IDEM's reasons for removing them from Category 5 appear in Attachment 6.

PROPOSED ADDITIONS TO INDIANA'S 303(D) LIST OF IMPAIRED WATERS

Waterbody Impairments Added to Category 5 Based on Changes in Segmentation

In accordance with IDEM procedure and U.S. EPA policy, impairments may not be removed from the 303(d) list based solely on changes in segmentation. All impairments of an AU that has been re-indexed must be reevaluated to determine their applicability to the resulting new AUs. Attachment 7 identifies all the impairments that were added back to the list under their new AUIDs and includes both impairments for which the applicability of the original assessment have been verified and those still pending reassessment. For the 2014 cycle, IDEM has added a total of 1,196 impairments to Category 5 as a result of changes made in segmentation.

Waterbody Impairments Added to Category 5 Based on New or Revised Assessments

This section includes waterbody impairments added to Category 5 based on more recent data or other information that have become available since IDEM's 2012 303(d) list submittal. For a lake or stream to be listed, IDEM must have sampling data representative of that waterbody and the data collected must support 303(d) listing in accordance with IDEM's CALM. The waterbody impairments added to the 303(d) list on the basis of new or revised assessments are located primarily in the Great Lakes basin and Ohio River tributaries, which were sampled by IDEM in 2010, and the White River, West Fork basin sampled in 2011. Assessments for the Ohio River were also revised this cycle based on data and information provided by the ORSANCO. Based on these assessments, IDEM has added a total of 329 impairments to Category 5 (Attachment 8).

Waterbody Impairments Added to Category 5 Based on IDEM's Ongoing Review to Identify Errors and Omissions and to Ensure Consistency with Indiana's Water Quality Standards

IDEM routinely reviews its 303(d) list for errors and omissions and to ensure consistency with Indiana's WQS and the information IDEM maintains in its ADB. For the 2014 cycle, IDEM has identified a total of 32 impairments that should be added to Category 5 for various reasons. These impairments and IDEM's reasons for adding them to Category 5 appear in Attachment 9.

SUMMARY OF CHANGES

Table 2 summarizes the proposed removals from and additions to Indiana's 303(d) list and their impacts on the total number of AUs listed by waterbody type and their associated stream miles and lake acres. Table 3 and Table 4 provide a comparison of the 2012 and 2014 303(d) lists in terms of the total number of AUs listed and the total number of impairments listed, respectively. Table 5 summarizes the proposed changes to Indiana's 303(d) list in terms of the types of impairments that appeared on the 303(d) list submitted as an addendum to the 2012 Integrated Report on December 28, 2012, versus those that appear on the 2014 draft 303(d) list. The proposed changes will result in a draft 2014 303(d) List of Impaired Waters containing a total of 3,637 individual impairments compared to 3,039 individual impairments³ for the 2012 303(d) list submitted to the U.S. EPA on December 28, 2012 (AUs with multiple impairments are listed once for each impairment).

Attachment 10 consists of the proposed Category 5A and Category 5B impairments that together comprise the draft 2014 303(d) list of impaired waters for Indiana. The 303(d) list is a subset of Indiana's Consolidated List to be submitted to the U.S. EPA in 2014 as part of Indiana's Integrated Water Quality Monitoring and Assessment Report..

Table 2: Proposed changes to Indiana's 303(d) List of Impaired Waters in terms of total number of AUs listed by waterbody type and their associated stream miles or lake acres.

| Nature of Proposed Changes to the 2012 303(d) List Submitted to the U.S. EPA as an Addendum to Indiana's Integrated Report on December 28, 2012 | Number of Stream Assessment Units | Total Stream Miles | Number of Lake Assessment Units | Total Lake Acres |
|---|-----------------------------------|--------------------|---------------------------------|------------------|
| Waterbody Impairments Removed from Category 5 | | | | |
| Waterbody impairments moved from Category 5 to Category 4A based on TMDL development** | 9 | 100 | 0 | 0 |
| Waterbody impairments moved from Category 5A to Category 4A based on IDEM's review of previously approved TMDLs | 47 | 285 | 0 | 0 |
| Waterbody impairments removed from Category 5 based on changes in segmentation | 560 | 3,230 | NA | NA |

³ The total number of impairments on the 303(d) list submitted with IDEM's addendum to its 2012 Integrated Report was incorrectly reported as 3,040. The actual number of impairments in Category 5 as of December 28, 2012, was 3,039.

| Nature of Proposed Changes to the 2012 303(d) List Submitted to the U.S. EPA as an Addendum to Indiana's Integrated Report on December 28, 2012 | Number of Stream Assessment Units | Total Stream Miles | Number of Lake Assessment Units | Total Lake Acres |
|---|-----------------------------------|--------------------|---------------------------------|------------------|
| Waterbody impairments removed from Category 5 because new or revised assessments indicating the applicable water quality standards are being met | 77 | 554 | 0 | 0 |
| Waterbody impairments removed from Category 5 based on IDEM's ongoing review to identify errors and omissions and ensure consistency with Indiana's water quality standards | 19 | 157 | 2 | 19 |
| Waterbody Impairments Added to Category 5 | | | | |
| Waterbody impairments added back to Category 5 based on changes in segmentation | 807 | 7,530 | NA | NA |
| Waterbody impairments added to Category 5 based on new or revised assessments | 238 | 1,886 | 0 | 0 |
| Waterbody impairments added to Category 5 based on IDEM's ongoing review to identify errors and omissions and to ensure consistency with Indiana's water quality standards | 32 | 171 | 0 | 0 |

*These numbers do not reflect the 68 unique waterbodies totaling 444 miles with impairments newly identified through the TMDL process and for which the TMDL has been completed. These waters were placed directly in Category 4A.

Table 3: Comparison of the 303(d) List of Impaired Waters Submitted to the U.S. EPA as an addendum to Indiana's Integrated Report on December 28, 2012, and the Draft 2014 303(d) List of Impaired Waters in terms of the total number of individual AUs listed by waterbody type and their associated stream miles or lake acres.

| 303(d) List | Total Number of Assessment Units | Number of Stream Assessment Units | Total Stream Miles | Number of Lake Assessment Units | Total Lake Acres |
|---|----------------------------------|-----------------------------------|--------------------|---------------------------------|------------------|
| 2012 303(d) List submitted to the U.S. EPA on December 28, 2012 | 1,819 | 1,707 | 12,632 | 121 | 43,613* |
| Draft 2014 303(d) List | 2,356 | 2,353 | 20,601 | 132 | 60,254* |

*For the purposes of accurate year-to-year comparisons, these totals do not include the 154,176 acres of Lake Michigan.

Table 4: Proposed changes to Indiana's 303(d) List of Impaired Waters in terms of the total number of impairments added or removed from the 303(d) list submitted to the U.S. EPA as an addendum to Indiana's Integrated Report on December 28, 2012.

| | |
|--|--------------|
| Total Number of Impairments on the 2012 303(d) List Submitted to U.S. EPA on December 28, 2012 | 3,039 |
| Waterbody impairments moved from Category 5 to Category 4A based on TMDL development* | 9 |
| Waterbody impairments moved from Category 5A to Category 4A based on IDEM's review of previously approved TMDLs | 47 |
| Waterbody impairments removed from Category 5 based on changes in segmentation | 802 |
| Waterbody impairments removed from Category 5 based on new or revised assessments indicating the applicable water quality standards are being met | 80 |
| Waterbody impairments removed from Category 5 based on IDEM's ongoing review to identify errors and omissions and to ensure consistency with Indiana's water quality standards | 21 |
| DELISTINGS TOTAL | 959 |
| Waterbody impairments added back to Category 5 based on changes in segmentation | 1,196 |
| Waterbody impairments added to Category 5 based on new or revised assessments | 329 |
| Waterbody impairments added to Category 5 based on IDEM's ongoing review to identify errors and omissions and to ensure consistency with Indiana's water quality standards | 32 |
| ADDITIONS TOTAL | 1,557 |
| Total Number of Impairments on Draft 2014 303(d) List | 3,637 |

*This number does not include the 69 individual impairments newly identified through the TMDL process and for which the TMDL has been completed. These impairments were placed directly in Category 4A.

Table 5: Comparison of the 303(d) list submitted to the U.S. EPA as an addendum to Indiana’s Integrated Report on December 28, 2012, and the draft 2014 303(d) list by impairment type.

| Cause of Impairment | Number of Impairments on the 303(d) List Submitted to the U.S. EPA on December 28, 2012 | Number of Impairments on the Draft 2014 303(d) List |
|-----------------------------|--|--|
| ALGAE | 20 | 12 |
| AMMONIA | 10 | 11 |
| CHLORIDE | 17 | 19 |
| FREE CYANIDE | 5 | 5 |
| DIOXIN (WATER) | 69 | 69 |
| DISSOLVED OXYGEN | 182 | 298 |
| E. COLI | 1,075 | 1,305 |
| IMPAIRED BIOTIC COMMUNITIES | 597 | 748 |
| NUTRIENTS | 124 | 223 |
| OIL AND GREASE | 5 | 5 |
| PESTICIDES | 1 | 3 |
| PH | 22 | 24 |
| PHOSPHORUS | 50 | 50 |
| SILTATION | 3 | 2 |
| SULFATE | 1 | 1 |
| TASTE AND ODOR | 12 | 12 |
| PCBs (FISH TISSUE) | 599 | 649 |
| PCBs (WATER) | 69 | 69 |
| TOTAL MERCURY (FISH TISSUE) | 115 | 70 |
| TOTAL MERCURY (WATER) | 63 | 62 |
| Total | 3,039 | 3,637 |